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REMARKS

Claims 1-28 are pending in the present application. Claims 1, 3, 4, 13, 19-21, and 28 were examined and stand rejected. Claims 2, 5-12, 14-18, and 22-27 have been withdrawn from consideration as allegedly being drawn to a distinct species. Applicant again asserts that because all the independent claims, which are generic to all of the alleged species, are in condition for allowance as will be set forth more fully below, claims 2, 5-12, and 14-18 are allowable at least due to their dependence upon the allowable generic claims and should be rejoined for examination. Applicant respectfully traverses the rejections of these claims and request reconsideration based on the comments that follow.

Claims 19-21 and 28 were finally rejected under 35 USC §102(b) as being anticipated by Kamp (U.S. Pat. No. 4,899,025). The Applicant respectfully disagrees as follows.

With respect to independent claim 19, the final Office Action asserted that Kamp discloses all of the claimed elements. For example, the Office Action asserts that Kamp discloses all of the claimed elements including the claimed "work head" and "inductive coupling assembly configured to removably couple [a] power supply to the work head." In support of this assertion, the Office Action equates the workpiece 4 taught by Kamp to the claimed "work head." Kamp specifically discloses that the workpiece 4 is a cathode ray tube (See col. 3, ll. 2-6). No teaching or suggestion is given by Kamp, however, that the cathode ray tube 4 is coupled to the power supply 1, either directly or inductively. To do so would in fact be nonsensical in the context of Kamp, which is actually inductively heating a getter via conductive supports 9 and 10 so that the getter deposits on the wall of the cathode ray tube 4. Thus, the assertion in the Office Action that workpiece 4 (i.e., the cathode ray tube) is electrically coupled to the power supply 1 via the secondary coil is inconsistent with the actual teachings of Kamp.

Kamp instead discloses a power supply 1 having a standard transformer with a primary coil 24, a secondary coil 13, and a transformer core 12. This transformer supplies power to two coils 5, 7 wired together, either in parallel as shown or in series. The coils 5, 7 include magnetic cores 6, 8, respectively, forming something akin to a "work head" that is used to induce heating in the supports 9, 10, which are contained within the workpiece or cathode ray tube 4. The cores 6, 8 within the coils 5, 7 are independently movable (but not removable) within the coils 5, 7 in order to control the application of heating energy (i.e., electromagnetic flux 20) from the "work

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head" (i.e., the cores 6, 8 of coils 5, 7) to the supports 9, 10 within the workpiece 4. Assuming, *arguendo*, that the coils 6,8 could be equated to the claimed "work head" rather than the workpiece 4, the specifically claimed elements of claim 19 are still not met by Kamp since the coils 5, 7 are not removably coupled with the power supply 1, but are rather hardwired as shown in the sole figure.

In response to Applicant's previous arguments that Kamp does not teach the claimed removably coupled power supply, the present Office Action asserts that Kamp is "definitely capable to removably couple the inductive coupling assembly 5, 7 to the power supply," citing col. 2, lines 35-55 and the sole figure in support. These cited portions of Kamp, however, do not teach removable coupling of the coils 5, 7 to the power supply 1. Rather, this portion of the disclosure actually teaches to the contrary stating that the "the secondary winding 13 is formed by a single conductor . . . connected to the induction coils 5 and 7 via the supply lines 11." (See col. 2, ll. 54-56). Thus, the coils 5 and 7 are permanently, not removably, coupled to the power supply.

Furthermore, the Office Action is inconsistent in equating claimed elements to the elements disclosed by Kamp. Specifically, the Office Action first equates the claimed "inductive coupling assembly" with the disclosed induction coils 5, 7 in Kamp and then later expediently states that the "inductive coupling assembly" also "includ[es] a primary coil 24, a secondary coil 13 and an inductive core 12." These latter elements of Kamp, however, are all part of the power supply 1. Thus, it is illogical to state that they comprise the "inductive coupling assembly," which is also claimed as serving to "removably couple the power supply to a work head." This inconsistent and illogical equating of terms evinces that the rejection is not properly applying §102 requiring that the elements of the anticipating reference must be arranged as required by the claim. (See §2131 of the M.P.E.P.). Further, assuming, *arguendo*, that the Office Action intended to equate the conglomeration of induction coils 5, 7, the primary coil 24, the secondary coil 13, and the transformer core 12 to the claimed "inductive coupling assembly," Kamp would still not meet the claimed elements (i.e., "an inductive coupling assembly configured to removably couple the power supply to the work head"). That is, the power supply 1 is not removably coupled to the "work head" (i.e., either cathode ray tube 4, as proffered in the

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rejection, or the coils 5, 7 as argued above), but is permanently coupled in the case of the coils 5, 7 or never coupled in the case of cathode ray tube 4..

Furthermore, Kamp does not disclose that the primary coil 24 and secondary coil 13 are magnetically coupled through the inductor core when a coupling assembly is coupled. Instead, the primary coil 24 and secondary coil 13 remain permanently magnetically coupled through core 12, as is the case in any fixed transformer assembly.

In light of the above comments, the Applicant respectfully submits that claim 19 is not anticipated or obvious in view of the teachings of Kamp.

Dependent claims 20 and 21 depend from claim 19 and are thus also allowable for at least the same reasons presented above. Furthermore, withdrawn dependent claims 22-27, which also depend from allowable claim 19, are also believed to be allowable for at least the same reasons and should be rejoined for examination on that basis.

With respect to independent claim 28, the Office Action asserts that Kamp discloses all of the elements of this claim. Applicant respectfully disagrees. Claim 28 features, among other things, "a cable assembly having a first end coupled to a secondary coil and a second end coupled to a work head; an inductor core; and means for removably coupling the cable assembly to the power supply such that the inductor core couples between the primary coil and the secondary coil." The Office Action equates the supply lines 11 of Kamp with the claimed "cable assembly" and the transformer core 12 with the claimed "inductor core." The Office Action then asserts that the coils 5, 7 of Kamp are equivalent to the claimed "means for removably coupling the cable assembly to the power supply." As discussed previously, however, the primary coil 24 of Kamp is permanently coupled to the wire 11 and coils 5, 7 through the transformer with primary coil 24, secondary coil 13, and core 12. Kamp does not disclose in any way removably coupling the supply lines 11 to the power supply 1, namely the transformer core 12. Accordingly, Applicant submits that Kamp does not disclose or suggest all of the elements of claim 28 and that this claim is therefore allowable over Kamp.

Claims 1, 3, 4, and 13 were finally rejected under 35 USC §103(a) as being unpatentable over Kamp in view of Tamura (US Pat. Pub. 2001/039137). Applicant respectfully traverses this rejection for the following reasons.

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The present Office Action rejected claim 1 by asserting that Kamp discloses all of the elements except for the claimed "inductive coupling sleeve." The Office Action then asserts that Tamura teaches this element and that it would have been obvious to modify Kamp to include a protective sleeve as taught by Tamura "as reasonably pertinent to the particular problem of facilitating the assembly of the inductive heating device in according with MPEP 2141.01(a)." Applicant respectfully disagrees. First, Tamura teaches a high voltage connector (e.g., a plug 25) that is normally used for connecting a conductor core 21 to another cable. Tamura includes a sheath 1 to protect the plug 25 and a conductor 3 in the sheath 1 to effect short circuiting of the conductor core 21 to a "sleeve" 23, which is actually shielding 23, such as that used in coaxial cables. This short-circuiting ensures no static charge is accumulated when the high voltage conductor is off. (See col. 2, ¶ 0026). Thus, Tamura does not teach an "inductive coupling sleeve" as featured in claim 1, but rather merely is teaching a protective sheath 1 that effects short circuiting between a conductor core and a shield of the conductor. As argued previously and recognized in the Office Action, Kamp further does not teach or suggest the claimed "sleeve." Further, Kamp and Tamura also fail to disclose "an inductive coupling sleeve having a secondary coil positioned therein" as featured in claim 1. Accordingly, the §103 rejection is believed to be untenable as all of the claimed elements are not taught by the combination of the cited references.

Claim 1 also features "the inductive coupling assembly . . . configured to removably couple the cable assembly to the power supply in inductively coupling the inductor core between the primary coil and the secondary coil." As argued previously with respect to claim 19, Kamp does not teach or suggest removably coupling a work head (or a cable as featured in claim 1) to the power supply and inductively coupling the inductor core between the primary and second coils. Rather, the primary coil 24 and secondary coil 13 (and accompanying supply lines 11) in power supply 1 are permanently coupled. Tamura also does not teach or even suggest a removable inductive coupling as featured in the claim. Accordingly, Kamp and Tamura, either separately or combined, additionally fail to teach or suggest this claimed element.

Furthermore, the above teachings of Tamura relate to a protective, short-circuiting sheath. This teaching in no way is "reasonably pertinent to the particular problem of facilitating the assembly of the inductive heating device" as alleged in the Office Action. Accordingly, even

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motivation to combine these references is lacking and does not comport with cited section 2141.01(a) of the MPEP, because providing a short-circuiting, protective sheath for a plug is not reasonably pertinent to the problem of providing a removable inductive coupling.

In light of the foregoing comments, claim 1 is submitted to be allowable over Kamp and Tamura, either taken singly or in combination.

Dependent claims 3 and 4 depend from claim 1 and are also believed to be allowable for at least the same reasons. Furthermore, claim 1 is generic to withdrawn claims 2 and 5-12 and these claims should be rejoined for examination based on the allowability of claim 1.

With respect to independent method claim 13, this claim features, among other things, "coupling a sleeve positioned at a first end of cable assembly to the power supply, where the sleeve includes a secondary coil and a second portion of inductor core, such that the first and second portions of the inductor core inductively couple." As argued above, neither Kamp or Tamura teach or suggest the actual coupling of a sleeve with a power supply. Moreover, the cited references do not teach or suggest a sleeve having a secondary coil and a portion of an inductor core. The Office Action also has not affirmatively pointed out how the combination of Kamp and Tamura could disclose this claimed feature. Accordingly, claim 13 is submitted to be allowable over Kamp and Tamura because the references do not teach or suggest all of the elements of the claim, either taken singly or in combination.

Claim 13 is generic to withdrawn claims 14-18 and these claims should be rejoined for examination based on the allowability of claim 13 accordingly.

In conclusion, Applicant respectfully submits that claims 1-28 are in condition for allowance and requests that a Notice of Allowance be issued in this case. Should the Examiner have any questions, please contact the undersigned.

SEP 16 2005

Date

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Respectfully submitted,



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